

Date: Monday, 4/24/2006 10:26:16 AM
User: Kim Johnston

Process Sheet

Customer	: CU-DAR001 Dart Helicopters Services	Drawing Name	: NUT PLATE
Job Number	: 26776		
Estimate Number	: 11262		
P.O. Number	: N/A	Part Number	: D3415041
This Issue	: 4/24/2006 S.O. No. : N/A	Drawing Number	: D3415 REV B
Prsht Rev.	: NC	Project Number	: N/A
First Issue	: N/A Type : PURCHASED PARTS	Drawing Revision	: B
Previous Run	: N/A	Material	: N/A
Written By	: <u>SKY COMMENT: Below</u>	Due Date	: 5/10/2006
Checked & Approved By	: <u>06.04.24</u>	Qty:	10 Um: Each
Comment	: Est: A 05.10.03 New issue KJ/JLM		

Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
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1.0	PG	PURCHASING
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Comment: PURCHASING

Issue P/O: 1074

Email or Ship DXF file to vendor

Laser Cut D3415-1flat pattern as per Dwg D3415

Possible Supplier: Industrial Laser

Material release note is required

C2 06/04/24 (10)

2.0	D34151F	Lug Bracket
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Comment: Qty.: 1.0000 U(s)/Unit Total : 10.0000 U(s)

Lug Bracket

3.0	PACKAGING 1	PACKAGING RESOURCE #1
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Comment: PACKAGING RESOURCE #1

Receive & Inspect for Transit Damage

Ensure Material Release Note is attached

SL 06/05/08 (13)

4.0	QC6	DIMENSIONAL CHECK
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Comment: DIMENSIONAL CHECK

J 06/05/08 (13)

5.0	SMALL FAB 1	SMALL & MEDIUM FAB RESOURCE 1
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Comment: SMALL & MEDIUM FAB RESOURCE 1


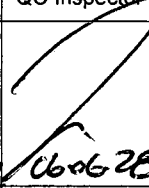
1- Deburr


SAD 06/05/12 13

2-C'sink as per Dwg D3415

SAD 06/06/19 (13)

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	
06.06.07	8.1	THERE IS AN ERROR ON THE DWG. BY REPLACE MS 20613-363 with: MS20427 F3-3 RIVETS, QTY (2) BACK!				 06.06.07 PLV GJH	 06.06.07	

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes ☒ No ☐ DQA:  Date: 06/06/07

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Monday, 4/24/2006 10:26:16 AM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: NUT PLATE

Job Number: 26776

Part Number: D3415041

Job Number:



Seq. #:

Machine Or Operation:

Description :

6.0

POWDER COATING

POWDER COATING



Comment: POWDER COATING

Powder Coat White Gloss (Ref: 4.3.5.1) as per QSI 005 4.3

06-05-31

(13)

7.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

8.0

MS21070L4

Inventory



Comment: Qty.: 1.0000 Each(s)/Unit Total: 10.0000 Each(s)

Nut Plate

Pick:

Qty Part Number Description Batch

1 MS21070L4 Nut Plate

M18762 (6) M100857 (4)+(3)ff

9.0

SMALL FAB 1

SMALL & MEDIUM FAB RESOURCE 1



Comment: SMALL & MEDIUM FAB RESOURCE 1

Install Nut plate as per Dwg D3415

FF. 06.06.27

10.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

11.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: *87434*

06/06/28

12.0

DC

DOCUMENT CONTROL



Comment: DOCUMENT CONTROL

Inspection Level 21

06/06/27

Job Completion



8.1 MS20613-303 Rivet x2 BAKH: M17654

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

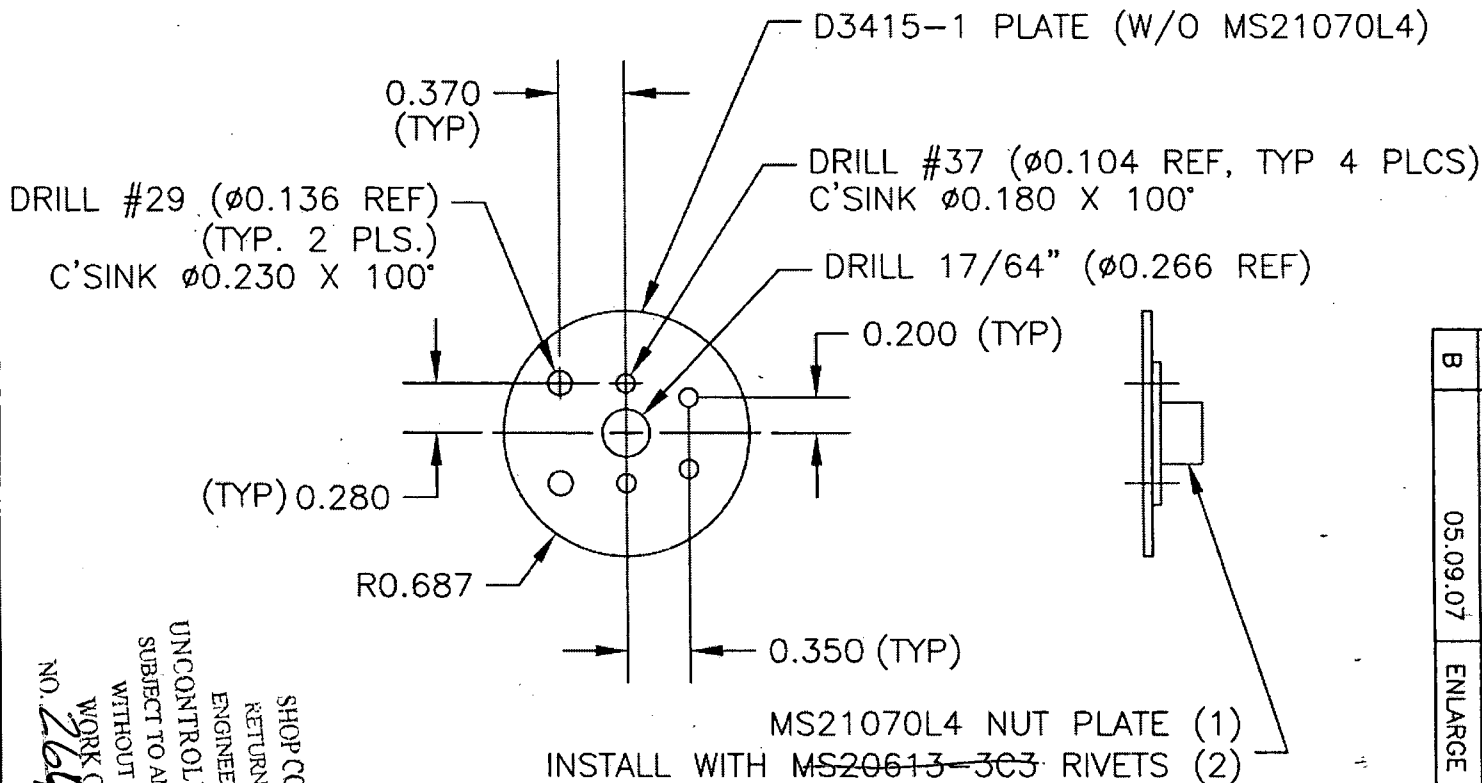
QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART

DESIGN	CP	DRAWN BY	CP	DART AEROSPACE USA, INC.	
CHECKED	<i>[Signature]</i>	APPROVED	<i>[Signature]</i>	PORT HADLOCK, WA	REV. B
DATE	05.09.07	DRAWING NO.	D3415	SHEET 1 OF 1	SCALE
		TITLE	NUT PLATE		1:1
A	05.03.16	NEW ISSUE	1		
B	05.09.07	ENLARGE ALL HOLES FOR POWDER COAT			



MS 20427 F 3-3

06.06.07

RELEASED
05.09.09

D3415-041 NUT PLATE

- 1) MATERIAL: AISI 304 SS SHEET, 0.063 THICK
(16 GAUGE, REF DART SPEC. M304S16GA)
- 2) FINISH: POWDER COAT WHITE (4.3.5.1) PER DART QSI 005 4.3
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.015

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 26476

MATERIAL TEST/INSPECTION CERTIFICATE



YIEH MAU CORP.
INVOICE NO. : F05MB11
COMMODITY : PRIME COLD ROLLED STAINLESS STEEL SHEET

90270962

工廠:高雄縣林竹脚順安路345號
345, SHUN AN RD, LU CHU KSIANG
KAOHSUNG TAIWAN R.O.C.
TEL: (07) 6972885 FAX: (07) 6973903
CERTIFICATE NO: F05MB11
DATE OF ISSUE: 12/30/2005
PAGE: 3/3

SPECIFICATION : AISI 304
CUSTOMER : INTEGRIS METALS LTD.

CUSTOMER		INTEGRITY METALS LTD.						Physical Properties					Chemical Composition							
ITEM NO.	SIZE	NO.	Weight (N.W.)		Heat No.	ID NO.	Tensile Test (CL=50 mm)					(%)								
			KGS	LBS			Y.S. (N/mm ²)	T.S. (N/mm ²)	EL. (%)	HRB	HV	C x120	Si x100	Mn x100	P x1000	S x1000	Ni x100	Cr x100	N x100	
AISI 304, 2B FINISH, WITH PAPER INTERLEAVED, SLITTED EDGE.																				
7425-5850	22GA 148"X 96"	1	1,402	3,091	YU235490	49S14258A-222	285	659	54	60	155	4.1	48	122	33	7	810	1813	3.4	
7425-5951	22GA 148"X 120"	1	1,393	3,071	YU235490	49S14258A-221	285	659	54	60	155	4.1	48	122	33	7	810	1813	3.4	
7425-8310	20GA 148"X 96"	1	1,407	3,102	YU140210	4BS20598A-3	272	667	55	70	161	5.3	52	120	35	8	804	1826	2.9	
7425-2494	18GA 148"X 96"	1	1,428	3,148	YU236347	4BS20581A-3	285	662	54	62	160	5.3	57	120	32	6	812	1809	2.4	
7425-5059	16GA 148"X 96"	1	1,443	3,177	YU236347	4BS20475B-3	306	655	53	64	168	4.3	55	120	35	7	803	1807	3.4	
7425-5058	16GA 148"X 96"	1	1,441	3,177	YU236347	4BS20473B-4	305	665	53	64	168	4.3	55	120	35	7	803	1807	3.4	
7425-5166	16GA 148"X 120"	1	1,414	3,124	YU236347	4BS20473B-5	305	656	53	64	168	4.3	55	120	35	7	803	1807	3.4	
7425-5166	16GA 148"X 120"	1	1,415	3,120	YU236347	4BS20473B-6	305	656	53	64	168	4.3	55	120	35	7	803	1807	3.4	
7425-8053	14GA 148"X 120"	1	1,414	3,117	YU140146	4BS20105A-6	313	647	53	64	168	4.2	50	110	33	10	816	1844	3.1	
7425-8053	14GA 148"X 120"	1	1,416	3,132	YU140146	4BS20106A-7	313	647	53	64	168	4.2	50	110	33	10	816	1844	3.1	
7425-8277	14GA 160"X 120"	1	1,485	3,172	YU140018	4BS19461B-3	306	672	50	65	173	4.9	47	118	32	10	804	1830	2.8	
7427-3699	12GA 148"X 120"	1	1,444	3,183	YU236346	4BS20448A-13	300	656	51	64	167	4.1	49	124	33	7	810	1817	3	
7427-3699	12GA 148"X 120"	1	1,444	3,183	YU236346	4BS20448A-14	300	656	51	64	167	4.1	49	124	33	7	810	1817	3	
7427-4242	12GA 160"X 144"	1	1,968	3,016	YU140018	4BS19461A-11	304	654	50	64	167	4.9	47	118	32	10	804	1830	2.8	
7427-4242	12GA 160"X 144"	1	1,968	3,016	YU140018	4BS19461A-12	304	654	50	64	167	4.9	47	118	32	10	804	1830	2.8	
			16	21,287	46,819															
NO MERCURY CONTAMINATION																				
Read test record for all Heat NO.																				

16 21.287 46.819

NO MERCURY CONTAMINATION
I HEREBY CERTIFY THAT THE MATERIAL DESCRIBED HEREIN HAS
BEEN MADE IN ACCORDANCE WITH THE RULES OF THE MILL CERTIFICATE.

Bend test: good for all Heat NO.



- PRIME MATERIAL, NO DINGS, NO DENTS, NO SCRATCHES
- P.O. NO. 437634 (VANCOUVER)
- SALES CONTRACT NUMBER: F05MB11
- DOCUMENTARY CREDIT NUMBER: ILCMSPO03154

YIEH MAU CORP.

Lin Kuen Hsing
Manager of Quality Assurance Section



P41123PC002
 Certified in accordance to Pressure Equipment Directive 97/23/EC Annex I,
 Paragraph 4.3 by TÜV Anlagentechnik GmbH (Notified Body Identification No. 0035)
 Inspection Certificate EN10204-3.1B

Taiyuan Iron and Steel(Group)Co.,LTD				INSPECTION CERTIFICATE						
NO.2 jiancaoping, Taiyuan, Shanxi, P.R.China TEL: (0351)3013328 FAX: (0351)3017816 http://www.tisco.com.cn E-mail: tgbxg@tisco.com.cn				MATERIAL		AISI304 No.2B Finish				
				SPECIFICATION		ASTM A240/A480 ASME SA240/SA480				
				L/C NO.						
				CERTIFICATE NO.		200412110				
				DATE OF ISSUE		11				
CUSTOMER		CONTRACT NO.		DATA OF						
Marubeni-Itochu Steel Co.		Y-947		2004/12/20						
Product		Melting furnace		Inspectors stamp		Mark of the Manufacturer				
COIL		E+VOD				Shanxi Taiyuan Stainless Steel Co.,Ltd				
NO.	Heat No.	Coil No.	Quantity	Dimensions		Weight (kg)				
1	4405025	4A11-303-12B	1	11GA x 48 x C		4358				
2	4404509	4A10-356-12B	1	14GA x 48 x C		3920				
3	QHLL0164	4A12-141-3ZJ	1	14GA x 48 x C		4972				
4	Y408037	4A12-373-42D	1	12GA x 48 x C		4382				
5	Y408037	4A12-374-42D	1	12GA x 48 x C		4347				
6	Y408037	4A12-375-42D	1	12GA x 48 x C		4257				
7	4405608	4A12-341-1ZJ	1	12GA x 48 x C		3793				
Chemical Composition										
Heat No.	C	Si	Mn	P	S	Cu	Ni	Al	Mo	N
4405025	0.060	0.470	1.340	0.020	0.002	18.050	8.100			0.039
4404509	0.050	0.470	1.350	0.021	0.002	18.080	8.120			0.060
QHLL0164	0.052	0.546	1.077	0.027	0.003	18.300	8.050			0.044
Y408037	0.063	0.550	0.980	0.030	0.002	18.320	8.170			0.060
Y408037	0.063	0.550	0.980	0.030	0.002	18.320	8.170			0.060
Y408037	0.053	0.550	0.980	0.030	0.002	18.320	8.170			0.060
4405608	0.060	0.510	1.350	0.021	0.002	18.090	8.100			0.055
Mechanical Properties										
Test No.	Tensile R _m N/mm ²	R _{0.2} Yield 0.2% N/mm ²	R _{p1.0} Yield 0.1% N/mm ²	Elongation A5%	Corrosion Tests	Hardness				
						HRB	HV	HRC		
4405025-T	610	255		65		83				
4404509-T	655	265		61.5		84				
QHLL0164-T	660	275		58.5		83				
Y408037-T	660	260		64		85				
Y408037-T	660	260		64		85				
Y408037-T	660	260		64		85				
4405608-T	655	265		61.5		84				
Surface and dimensions controlled:										
Work Inspector: 										



宝山钢铁股份有限公司
BAOSHAN IRON & STEEL CO., LTD.

制造厂: 宝钢分公司

Manufacturer: BAOSTEEL BRANCH

产品质量证明书

INSPECTION CERTIFICATE

上海市宝山区同济路 1800 号 邮编 201900

1800 TONGJI ROAD, BAOSHAN DISTRICT

201900 SHANGHAI, P. R. CHINA

TEL (021)26648888

FAX (021)26648000

ORIGINAL

订货单位 CUSTOMER	BAOSTEEL AMERICA INC. P5081901001	产品名称 PRODUCT	COLD ROLLED STEEL SHEET IN COILS		
收货单位 PURCHASER	BAOSTEEL AMERICA INC.	代号 CUSTOMER'S NO.	900003	证书号 CERTIFICATE NO.	LF1019401001 01
标准 SPECIFICATION	ASTM A1008 CS TYPE B	客户订单编号 CUSTOMER ORDER NO.			
		签发日期 DATE OF ISSUE	2005/11/16	交货日期 DATE OF DELIVERY	2005/11/16
		许可证号 LICENSE NO.		合同号 CONTRACT NO.	LF10194A01

序 号 NO.	钢卷 / 捆包号 COIL/PACK NO.	件 数 QTY	炉 号 HEAT NO.	规格及重量 MATERIAL DESCRIPTION					化学成分 CHEMICAL COMPOSITION % (熔炼分析 HEAT ANALYSIS)												拉伸试验 TENSILE TEST (G.L = L2)				弯 曲 BEND TEST	*0 硬 度 HARD NESS	*08 杯 突 MPa	BH 值 MPa
				厚度 THICK	宽度 WIDTH	长度 LENGTH	张 数 SHEETS	重量 MASS (kg)	C	Si	Mn	P	S	TA							屈服 Y.S.	抗拉 T.S.	伸长 EL					
				mm					x10 ³	x10 ²	x10 ²	x10 ³	x10 ³	x10 ³	x10	x10	x10	x10	x10	x10	MPa		%	值	值			
1	109976102	1	127336					8580	3	1	24	18	10	48							150	309	46					
2	109976103	1	127336					8625	3	1	24	18	10	48							150	309	46					
3	109976104	1	127336					8660	3	1	24	18	10	48							150	309	46					
4	109976302	2	127336					8810	3	1	24	18	10	48							155	309	44					
5	109976303	1	127336					8865	3	1	24	18	10	48							155	309	44					
6	109976304	1	127336					8310	3	1	24	18	10	48							155	309	44					
7	110003302	1	127336					8580	3	1	24	18	10	48							150	305	45					
8	110003303	1	127336					8265	3	1	24	18	10	48							150	305	45					
9	110003304	1	127336					8475	3	1	24	18	10	48							150	305	45					

合计 Total

9

74970

SIZE: 0.0470" NOM X48.0000"X

备注
REMARKS

注释
NOTES

Y.S. = YIELD STRENGTH T.S. = TENSILE STRENGTH EL = ELONGATION G.L. = GAUGE LENGTH L1 = 5.65 SORT (FO) L2 = 50MM L3 = 80MM L4 = 200MM L5 = 11.3 SORT (FO)
*01: HRB *02: HRF *03: HR30T *04: HV *05: HR15T *06: ERICHSEN

会验者
SURVEYOR TO

本产品已按上述要求进行制造和检验, 其结果符合要求, 特此证明。
WE HEREBY CERTIFY THAT MATERIAL DESCRIBED HEREIN HAS MANUFACTURED AND TESTED
WITH SATISFACTORY RESULTS IN ACCORDANCE WITH THE REQUIREMENTS OF THE ABOVE
MATERIAL SPECIFICATION.

Feng Lai guo
制造管理部部长
MANAGER OF MANUF. MANAGEMENT DEP.

60117M049-1 T M INDUSTRIAL (P50819D1001-16)

Chris Provencal

From: David Shepherd [dshepherd@dartaero.com]
Sent: June 7, 2006 2:49 PM
To: 'Chris Provencal'
Cc: 'Serge Shahbazian (E-mail)'; 'Jean-Luc Menard (E-mail)'
Subject: RE: NCR D3415

OK substitution.

David

-----Original Message-----

From: Chris Provencal [mailto:cprovencal@dartaero.com]
Sent: Wednesday, June 07, 2006 12:25 PM
To: davids@dartaero.com
Cc: Serge Shahbazian (E-mail); Jean-Luc Menard (E-mail)
Subject: NCR D3415

David,

Drawing D3415 calls up MS20613-3C3 rivets, these aren't countersunk. MS20427F3-3 are countersunk and corrosion resistant steel. I must have called up flat head cres rivet by mistake on the drawing during my previous quest to cres all the hardware.

Is it OK to substitute these? We already have them in stock, we may have already OK'd such a substitution (I can't remember) because I know we've made these before. We will have the dwg updated.

-Chris

Sincerely,
Chris Provencal
DART Aerospace Ltd.
Email..cprovencal@dartaero.com
Phone...613-632-3336
Fax.....613-632-4443